

Claims

1. Steel alloy characterized in having the following composition (in % by weight)

5 C 0,40-0,60
 Si 0,1-1,0
 Mn 0,3-1,0
 Cr 12-15
 Mo 2,5-4,0
10 Ni 0-1,0
 Co 0-4,0
 N 0,15-0,20,

with the balance Fe as well as normally occurring impurities, the hardness being > 56 HRC, which should be possible
15 to be attained by hardening without deep freezing, as well as PRE > 25, defined as PRE = % Cr + 3,3 • % Mo + 16 • % N.

2. Steel alloy according to claim 1, wherein C = 0,42-0,60, preferably 0,42-0,50 % by weight.

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3. Steel alloy according to claim 1 or 2, wherein Si = 0,15-0,80, preferably 0,15-0,55 % by weight.

4. Steel alloy according to any one of claims 1-3, wherein
25 Mn = 0,4-0,8, preferably 0,4-0,7 % by weight.

5. Steel alloy according to any one of the preceding claims, wherein Cr = 13-15, preferably 14-15 % by weight.

30 6. Steel alloy according to any one of the preceding claims, wherein Mo = 2,6-4,0, preferably 2,6-3,0 % by weight.

7. Steel alloy according to any one of the preceding claims, the steel alloy comprising carbides, nitrides and/or carbonitrides, wherein the maximal diameter of the carbides, nitrides and/or carbonitrides does not exceed 5
5 μm .

8. Knife, such as a knife suitable for the food industry, carving knife and the like, characterized in that it comprises a steel alloy according to any one of
10 claims 1-7.

9. Cutting edges for either dry or wet shaving, characterized in that they comprise a steel alloy according to any one of claims 1-7.

15 10. Cutting tool for surgical applications, such as for instance a scalpel, characterized in that it comprises a steel alloy according to any one of claims 1-7.

20 11. Doctor blade or creping blade, characterized in that it comprises a steel alloy according to any one of claims 1-7.